

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Effects of Communications Towers on	)	WT Docket No. 03-187
Migratory Birds	)	

To:   The Commission

**REPLY COMMENTS OF RC TECHNOLOGIES CORPORATION**

RC Technologies Corporation (“RCT”) hereby submits its Reply Comments in the above-captioned proceeding<sup>1</sup> to oppose adoption of new rules that would constrain construction of communications towers, especially limitations that would economically burden providers of communications services in rural areas. Having recently constructed two new tall guyed towers in rural South Dakota as part of a major upgrade to its wireless video and data services, RCT believes it can lend unique perspective to the record in this proceeding by addressing the “burdens that regulation would impose on small entities and how the Commission could impose such regulations while minimizing the burdens on small entities.”<sup>2</sup>

**Background**

RCT is a subsidiary of Roberts County Telephone Cooperative Association, a rural telecommunications cooperative based in New Effington, South Dakota. In 2005 and 2006, RCT acquired “wireless cable” systems operating on Broadband Radio Service and Educational Broadband Service spectrum covering 35-mile areas surrounding the

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<sup>1</sup> See *Effects of Communications Towers on Migratory Birds*, WT Docket No. 03-187, Notice of Proposed Rulemaking, 21 FCC Rcd 13241 (2007) (“*NPRM*”); *Order*, DA 07-72 (rel. Jan. 12, 2007) (extending deadline for filing Comments and Reply Comments).

<sup>2</sup> *NPRM*, Appendix A, “Initial Regulatory Flexibility Act Analysis,” at 35.

rural communities of Sisseton, Kranzburg and Willow Lake, South Dakota. The largest city in the footprint is Watertown, South Dakota, located a few miles west of the Kranzburg site, which has a population of about 23,000. Nearly all of the other communities have a population of a few hundred people or less.

RCT conducted a survey that demonstrated pent-up demand for additional video programming streams and broadband services. RCT then spent considerable time, expense and effort to design and plan construction of the country's first wireless MPEG-4 digital video and broadband system, a project that ultimately involved over 45 contractors, vendors from across the globe, numerous governmental and tribal approvals and construction of two new guyed towers at Sisseton and Kranzburg.<sup>3</sup> In addition to committing more than \$3 million of its own funds, the Rural Utilities Service of the U.S. Department of Agriculture approved a loan to RCT for approximately \$3.4 million to acquire and construct the new system.

New towers were necessary because the existing towers were not structurally sound enough to accommodate the new digital antennas and additional communications equipment needed for the upgrade. The Sisseton tower stands 499 feet above ground level and the Kranzburg tower stands 455 feet above ground level, and both are lighted in accordance with Federal Aviation Administration ("FAA") directives. The new towers cost a total of about \$400,000. As of today, the MPEG-4 system infrastructure is completely installed and all of the equipment is on site.

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<sup>3</sup> See ASR 1254031 and FAA Aeronautical Study No. 2005-AGL-6500-OE (Sisseton, SD); ASR 1254050 and FAA Aeronautical Study No. 2005-AGL-6501-OE (Kranzburg, SD). The previous towers were each over 400 feet tall, but were shorter than the replacement towers. RCT plans to dismantle the old Sisseton tower and has relocated its equipment from a leased Kranzburg tower to the newly constructed one.

Despite the fact that the new towers are replacing existing towers located at virtually the same locations as the old towers, RCT was required to comply with a panoply of local, tribal and federal regulations and obtain approvals from local zoning officials, the FAA, the Sisseton-Wahpeton Oyate Tribe and, pursuant to Section 1.1307 of the Commission's Rules, the Fish and Wildlife Service ("FWS"). Because FWS identified endangered and threatened species, RCT retained a biologist to confirm that construction of the towers would not have an adverse effect on the environment and that an environmental impact study was not required to be submitted to the Commission. This process added significant expense and several months to the tower construction process, which was already compromised by the short construction season in northeastern South Dakota. There are no other suitable towers in the vicinity of the Sisseton and Kranzburg tower sites that could accommodate the new MPEG-4 equipment.

Of particular relevance, with respect to the Kranzburg tower, FWS stated that "[w]hooping cranes migrate through South Dakota on their way to northern breeding grounds and southern wintering areas."<sup>4</sup> FWS further stated that "[i]f the proposed 500-foot guyed tower design cannot be modified to preclude [the risk of mortality to the cranes] entirely, we encourage the use of markers to make the wires more visible to birds." Upon further investigation, RCT contacted the South Dakota Department of Game, Fish and Parks (the state analog to the federal FWS), which issued a letter stating that "[w]hooping cranes are possible but unlikely migrants in this area. The normal

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<sup>4</sup> Letter dated December 5, 2005 from Peter Gober, Field Supervisor, South Dakota Field Office, FWS, to Jason Dale, CC&I Engineering, Inc. on behalf of RCT at 2.

<sup>5</sup> *Id.* at 3.

migration route of whooping cranes is farther west, mostly near the Missouri River.. ..

*I'm not aware of any reports of whooping crane collisions with communications towers.*<sup>6</sup>

Given FWS's "encouragement" and RCT's desire to promote the environment, RCT voluntarily decided to install bid diverters along the guy wires, at an additional cost of about \$20,000. 'While this decision certainly added a large expense to the project, RCT was concerned – and remains concerned – that the cost to add markers or other modifications to the tower at a future date would create economic burdens that would be much more difficult for rural companies like RCT to bear.

### **Discussion**

From its review of the record in this proceeding, RCT understands that there are questions surrounding the Commission's authority to impose regulations to protect migratory birds<sup>7</sup> and questions concerning the data used to support additional regulations.\* However, if the Commission decides it has the authority and the data to support new regulations, RCT urges the Commission to refrain from imposing those regulations in rural areas, specifically regulations that would limit tower heights or prohibit guyed towers.' As discussed by the National Telecommunications Cooperative Association ("NTCA"), restricting tower heights or prohibiting guyed towers would be

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<sup>6</sup> Letter dated March 9, 2006 from Doug Backlund, Wildlife Biologist, South Dakota Department of Game, Fish and Parks, to Jennifer Skorup, CC&I Engineering, Inc. on behalf of RCT (emphasis added).

<sup>7</sup> Compare, e.g., Comments of The Infrastructure Coalition, WT Docket No. 03-187 (submitted Apr. 23, 2007) ("Infrastructure Comments") at 16-42, with Comments of American Bird Conservancy, et al., WT Docket No. 03-187 (submitted Apr. 24, 2007) ("ABC Comments") at 12-21.

<sup>8</sup> See Infrastructure Comments at 42-53; Comments of AT&T Mobility LLC f/k/a Cingular Wireless LLC, WT Docket No. 03-187 (submitted Apr. 23, 2007) ("AT&T Comments") at 18-25.

<sup>9</sup> The Commission defines a "rural area" as a county that has a density of 100 persons or less per square mile. See Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, *Report and Order and Further Notice of Proposed Rule Making*, 19 FCC Rcd 19078 (2004) ("Rural Order") at 19087.

contrary to the Regulatory Flexibility Act (“RFA”),<sup>10</sup> which requires the Commission to consider alternatives such as exemption from compliance with a rule or establishing different regulations that take into account the resources available to small entities.<sup>11</sup>

As RCT’s experiences illustrate, the costs associated with adding bird diverters can increase the cost of the tower, and the cost to construct multiple towers or to construct a free-standing (unguyed) tower would be far greater.<sup>12</sup> Adding costs to require protection of migratory birds is contrary to the Commission’s objectives of promoting deployment of services in rural areas<sup>13</sup> and contrary to the RFA. As NTCA stated, “[t]hese per-tower expenditures will strain small rural carriers’ budgets and will hinder their deployment strategies for advanced telecommunications services, including mobile and fixed wireless voice, video and data.”<sup>14</sup>

In many areas of rural America, including northeast South Dakota, single tall towers may be more cost-effective than tower farms. In opposing proposed regulations that would restrict the height of towers, the South Dakota Public Utilities Commission stated that:

For optimum use and benefit of resources, wireless communications towers built in our rural areas should be at heights greater than 200 feet to enable a stronger signal to reach a wider geographic area, thus serving more residents, businesses and travelers. If restrictions on taller towers are adopted, these restrictions would have a negative impact on South Dakota. For example, in order to offer similar service to the same rural geographic area in South Dakota, a provider would have to erect three shorter towers as compared to one taller tower. Understanding the considerable investment a wireless provider makes when constructing a new tower, it is unlikely the provider would be willing to place three times

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<sup>10</sup> See 5 U.S.C. §§ 601-612.

<sup>11</sup> See *NPRM*, Appendix A, at 34, *citing* RFA, 5 U.S.C. § 603(c). See also Initial Comments of the National Telecommunications Cooperative Association, WT Docket No. 03-187 (“NTCA Comments”) at 9.

<sup>12</sup> See AT&T Comments at 19.

<sup>13</sup> See *Rural Order* at 19081-82.

<sup>14</sup> NTCA Comments at 7.

the number of shorter towers in South Dakota when one taller one would provide the same service. *Therefore, it can be reasoned that providers would erect fewer towers in South Dakota and the state's economic development, public safety and quality of life would suffer.*<sup>15</sup>

Likewise, the State of South Dakota Bureau of Information & Telecommunications (“South Dakota BIT”) commented that “[w]ireless communications towers in South Dakota are in most part driven by a coverage need rather than one of capacity.”<sup>16</sup>

This describes RCT’s situation to a “T.” If it had to construct multiple towers to avoid exceeding a height limit, RCT’s construction costs would increase substantially. Moreover, it is possible that RCT’s lender would not have agreed to a loan proposal that would replace one tower with three (or two with six). The ground area covered by the additional towers would be far greater, creating new environmental hurdles and, perhaps in some cases, disturbing more tribal land. Any one of these obstacles could stop a communications project in its tracks. Add to that the additional costs to maintain and power multiple towers, and the premonition of the State of South Dakota may well become reality.

Similarly, the Commission should not restrict the construction of guyed towers in rural areas. According to the South Dakota PUC, South Dakota is the fourth windiest state in the country such that “taller towers built in rural areas will require guy wires.”<sup>17</sup> The South Dakota BIT concurred, explaining that “larger towers in use by the State of South Dakota generally are guyed because of economics and weather conditions.

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<sup>15</sup> Comments of the South Dakota Public Utilities Commission, WT Docket No. 03-187 (submitted Mar. 8, 2007) (“South Dakota PUC Comments”) at 2 (emphasis added). *See also* Comments of the State of South Dakota, WT Docket No. 03-187 (submitted Mar. 13, 2007) (“South Dakota Comments”) (“For build-out in South Dakota’s underserved rural areas to take place, it likely will be necessary for towers to be taller than 200 feet for the optimum benefit of the end users, as well as for the wireless provider erecting the tower”).

<sup>16</sup> Comments of the South Dakota Bureau of Information & Telecommunications, WT Docket No. 03-187 (submitted Apr. 19, 2007) (“South Dakota BIT Comments”) at 1.

<sup>17</sup> South Dakota PUC Comments at 2.

Because of wind and icing conditions, guyed towers are the prevalent construction method in the state because of their survivability.”<sup>18</sup> And the State of South Dakota agrees, stating that “taller towers will likely need the stability that guy wires provide.””

RCT certainly agrees with these assessments, which confirm the need for the Commission to consider alternatives for small businesses, particularly those in rural areas. The record demonstrates that requiring towers in rural areas to be height-limited and free-standing would be cost-prohibitive and inappropriate. Instead, to the extent the Commission can and does adopt restrictions on towers, it should exempt towers in rural areas, consistent with the RFA and Commission policies designed to promote wireless services in rural areas.

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<sup>18</sup> South Dakota BIT Comments at 1.

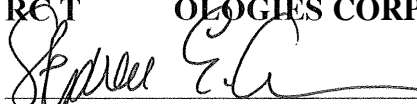
<sup>19</sup> South Dakota Comments at 1.

## Conclusion

Adopting rules limiting tower heights and prohibiting guyed towers would be contrary to the RFA, may be outside the Commission's authority and are unsupported by the record. Commenters from RCT's home state of South Dakota strongly support the view that rural providers should, at a minimum, be exempt from rules that would create additional economic burdens, are impractical and contrary to promoting deployment of advanced services in rural areas.

Respectfully submitted,

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